

AS A BELOW NAMED INVENTOR, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name.

I believe that I am the original, first and sole (if only one name is listed below), or an original, first and joint inventor (if plural names are listed below), of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**METHOD AND APPARATUS FOR PREDICTION OF COMPUTER SYSTEM PERFORMANCE BASED ON TYPES AND NUMBERS OF ACTIVE DEVICES**

the specification of which either is attached hereto or indicates an attorney dkt. no. YOR9-2001-0461 (8728-524), or:

☒ was filed in the U.S. Patent & Trademark Office on July 27, 2001 and assigned Serial No. 09/916,935,

☐ and (if applicable) was amended on \_\_\_\_\_,

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability and to the examination of this application in accordance with Title 37 of the Code of Federal Regulations §1.56. I hereby claim foreign priority benefits under Title 35, U.S. Code §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT international application which designated at least one country other than the United States, or §119(e) of any United States provisional application(s), listed below and have also identified below any foreign applications for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

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**Priority Claim d:**

Yes [ ] No [ ]

(Application Number) (Country) (Day/Month/Year filed)

MAR 04 2002

(Application Number) (Country) (Day/Month/Year filed)

Yes [ ] No [ ]

I hereby claim the benefit under Title 35, U.S. Code, §120, of any United States application(s), or §365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application(s) in the manner provided by the first paragraph of Title 35, U.S. Code, §112, I acknowledge the duty to disclose information material to patentability as defined in Title 37, The Code of Federal Regulations, §1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application:


(Application Serial Number) (Filing Date) (STATUS: patented, pending, abandoned)

I hereby appoint the following attorneys: **MANNY W. SCHECTER**, Reg. No. 31,722; **LAUREN C. BRUZZONE**, Reg. No. 35,082; **CHRISTOPHER A. HUGHES**, Reg. No. 26,914; **JOHN E. HOEL**, Reg. No. 26,279; **JOSEPH C. REDMOND, Jr.**, Reg. No. 18,753; **PAUL J. OTTERSTEDT**, Reg. No. 37,411; **DOUGLAS W. CAMERON**, Reg. No. 31,596; **STEPHEN C. KAUFMAN**, Reg. No. 29,551; **DANIEL P. MORRIS**, Reg. No. 32,053; **LOUIS J. PERCELLO**, Reg. No. 33,206; **MARIAN UNDERWEISER**, Reg. No. 46,134; **ROBERT M. TREPP**, Reg. No. 25,933; **LOUIS P. HERZBERG**, Reg. No. 41,500; **RICHARD M. LUDWIN**, Reg. No. 33,010; **MARC A. EHRlich**, Reg. No. 39,966; **ROBERT P. TASSINARI, JR.**, Reg. No. 36,030; and **DEREK S. JENNINGS**, Reg. No. 41,473; **GAIL ZARICK**, Reg. No. 43,303; **TIMOTHY M. FARRELL**, Reg. No. 37,321; each of them of **INTERNATIONAL BUSINESS MACHINES CORPORATION**, Thomas J. Watson Research Center, P.O. Box 218, Yorktown Heights, New York 10598; to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected therewith and with any divisional, continuation, continuation-in-part, reissue or re-examination application, with full power of appointment and with full power to substitute an associate attorney or agent, and to receive all patents which may issue thereon, and request that all correspondence be addressed to:


Frank Chau, Esq.  
F. CHAU & ASSOCIATES, LLP  
1900 Hempstead Turnpike, Suite 501  
East Meadow, New York 11554  
Tel. No.: (516) 357-0091

I HEREBY DECLARE that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 U.S. Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

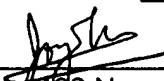
FULL NAME OF FIRST OR SOLE INVENTOR: Vittorio Castelli Citizenship Italian

Inventor's signature:  Date: 01/24/02  
Residence & Post Office Address: 72 Cleveland Drive  
Croton-on-Hudson, NY 10520

FULL NAME OF SECOND JOINT INVENTOR: Peter A. Franaszek Citizenship U.S.

Inventor's signature:  Date: 1/24/2002  
Residence & Post Office Address: 12 Spring Glen Drive  
Mount Kisko, NY 10549

FULL NAME OF THIRD JOINT INVENTOR: Joy Aloysius Thomas Citizenship INDIA

Inventor's signature:  Date: 1/15/2002  
Residence & Post Office Address: 492 Nuestra Avenue  
Sunnyvale, CA 94086

FULL NAME OF FOURTH JOINT INVENTOR: \_\_\_\_\_ Citizenship \_\_\_\_\_

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence & Post Office Address: \_\_\_\_\_



42  
C. Burrell  
3/18/02  
**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**APPLICANT(s):** Castelli et al.

**EXAMINER:** unassigned

**SERIAL NO:** 09/916,935

**GROUP ART UNIT:** 2183

**FILED:** July 27, 2001

**DOCKET:** 8728-524 (YOR9-2001-0461US1)

COPY OF PAPERS  
ORIGINALLY FILED

**FOR:** METHOD AND APPARATUS FOR PREDICTION  
OF COMPUTER SYSTEM PERFORMANCE BASED  
ON TYPES AND NUMBERS OF ACTIVE DEVICES

Assistant Commissioner for Patents  
Washington, D.C. 20231

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MAR 04 2002  
Technology Center 2100

**PETITION PURSUANT TO 37 C.F.R. 1.48(a)**

I, Joy Aloysius Thomas, of 492 Nuestra Avenue, Sunnyvale, California 94086,  
hereby attest that I am a co-inventor of the subject matter disclosed in the above-identified patent  
application and, further, that my omission in the declaration and assignment documents filed  
concurrently with the application occurred without any deceptive intention on my part.

02/28/2002 AOSMAN! 00000091 500510 09916935

01 FC:122 130.00 CH

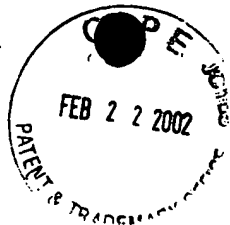
Joy Aloysius Thomas

**CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)**

I hereby certify that this correspondence is being deposited with the United States Postal  
Service as first class mail, postpaid in an envelope, addressed to the: Assistant Commissioner for  
Patents, Washington, D.C. 20231 on 2/5/2002

Dated: 2/5/2002

Gaspare J. Randazzo



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Assistant Commissioner for Patents  
Washington, D.C. 20231

Technology Center 2100

**REQUEST TO CORRECT INVENTORSHIP PURSUANT TO 37 C.F.R. 1.48(a)**

Correction of the inventorship of the above-identified application is respectfully requested. The inventorship was in error because Joy Aloysius Thomas was inadvertently omitted in the declaration and assignment documents filed concurrently with the above-identified patent application.

Enclosed herewith are:

- (1) Amendment Pursuant to 37 C.F.R. §1.48(a);

**CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postpaid in an envelope, addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231 on February 5, 2002.

Dated: February 5, 2002

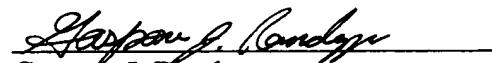
  
Gaspare J. Randazzo

- (2) Statement by Co-Inventor Pursuant to 37 C.F.R. §1.48(a);
- (3) newly executed Declaration document; and
- (4) Consent of Assignee Pursuant to 37 C.F.R. §3.73(b), Certificate under 37 C.F.R. §3.73(b), Letter of Authority, and copies of previously filed Assignment document and newly executed Assignment document.

The Commissioner is hereby authorized to charge the Processing Fee of \$130.00 under 37 C.F.R. §1.17(i) to Deposit Account No. 50-0510/IBM (Yorktown Heights). The Commissioner is also authorized to charge any deficiency as well as any other fee(s) which may become due under 37 C.F.R. §§1.16 and 1.17, at any time during the pendency of this application, or credit any overpayment of such fee(s) to Deposit Account No. 50-0510/IBM (Yorktown Heights). Also, in the event any extension of time for responding are required for the pending application(s), please treat this paper as a petition to extend the time as required and charge Deposit Account No. 50-0510/IBM (Yorktown Heights) therefor. TWO COPIES OF THIS SHEET ARE ENCLOSED.

Respectfully submitted,

F. CHAU & ASSOCIATES



Gaspare J. Randazzo

Reg. No. 41,528

Attorney for Applicant

F. CHAU & ASSOCIATES  
1900 Hempstead Turnpike  
Suite 501  
East Meadow, NY 11554  
(516) 357-0091  
FC/GJR



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**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**APPLICANT(s):** Castelli et al.

**EXAMINER:** unassigned

**SERIAL NO:** 09/916,935

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Assistant Commissioner for Patents  
Washington, D.C. 20231

MAR 04 2002

Technology Center 2100

**AMENDMENT PURSUANT TO 37 C.F.R. 1.48(a)**

Sir:

Please amend the above-identified application as follows:

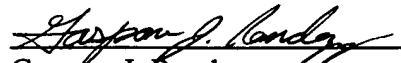
**INVENTORSHIP:**

Add Joy Aloysius Thomas as an inventor of the subject matter disclosed in the above-identified patent application.

**CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postpaid in an envelope, addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231 on February 5, 2002.

Dated: February 5, 2002

  
Gaspare J. Randazzo

## REMARKS

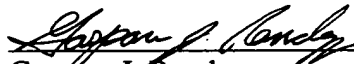
The above amendment is made to correct an error in inventorship. Joy Aloysius Thomas was inadvertently omitted in the declaration and assignment documents filed concurrently with the above-identified patent application. This amendment is accompanied by the following items, as specified in 37 C.F.R. §1.48(a):

- (1) Request to Correct Inventorship Pursuant to 37 C.F.R. §1.48(a);
- (2) Statement by Co-Inventor Pursuant to 37 C.F.R. §1.48(a);
- (3) newly executed Declaration document; and
- (4) Consent of Assignee Pursuant to 37 C.F.R. §3.73(b), Certificate under 37 C.F.R. §3.73(b), Letter of Authority, and copies of previously filed Assignment document and newly executed Assignment document.

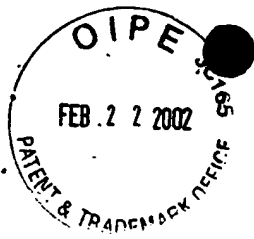
Respectfully submitted,

F. CHAU & ASSOCIATES

By:

  
Gaspare J. Randazzo  
Reg. No. 41,528  
Attorney for Applicant

F. CHAU & ASSOCIATES  
1900 Hempstead Turnpike  
Suite 501  
East Meadow, NY 11554  
(516) 357-0091  
FC/GJR



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**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**APPLICANT(s):** Castelli et al.

**EXAMINER:** unassigned

**SERIAL NO:** 09/916,935

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Assistant Commissioner for Patents  
Washington, D.C. 20231

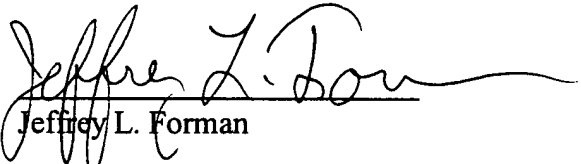
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**CONSENT OF ASSIGNEE PURSUANT TO 37 C.F.R. 3.73(b)**

I, Jeffrey L. Forman, hereby attest that I am authorized to act on behalf of the assignee, International Business Machines Corp., with respect to the above identified patent application. I further attest that the assignee consents to adding Mr. Joy Aloysius Thomas as an inventor of the subject matter disclosed in the above identified patent application. A copy of an assignment which was concurrently filed with the corresponding patent application is attached hereto.

Date: January 29, 2002

IBM Corp.  
Intellectual Property Law Dept.  
1735 Jefferson Davis Hwy  
Arlington, VA 22202

  
Jeffrey L. Forman

Title: Program Manager  
Patent Office Liaison

**CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postpaid in an envelope, addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231 on 2/5/2002.

Dated: 2/5/2002

  
Gaspare J. Randazzo



PATENT & TRADEMARK OFFICE  
22 2002

CERTIFICATE UNDER 37 CFR 3.73(b)

Applicant: Castelli et al.

Application No.: 09/916,935

Filed: July 27, 2001

Entitled: Method And Apparatus For Prediction Of Computer System  
Performance Based On Types And Numbers Of Active Devices

International Business Machines  
Corporation

a corporation of New York

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel 012048, Frame 0200, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.

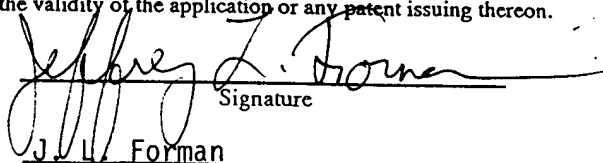
The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

January 29, 2002

Date

  
Signature

J. L. Forman

Typed or printed name

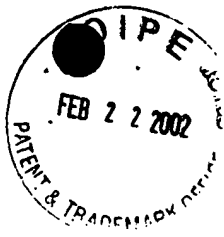
Docket #: YOR9-2001-0461US1

Program Manager, Patent Office Liaison

Title

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Technology Center 2100



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## LETTER OF AUTHORITY

I, Gerald Rosenthal, Vice President, Intellectual Property and Licensing of International Business Machines Corporation (IBM), a New York corporation, do hereby delegate the authority to approve and execute documents on behalf of IBM relating to proceedings in the Patent, Trademark Registration or Copyright Offices servicing any country or region of the world, or to related appeal proceedings, including, but not limited to: petitions; powers of Attorney; authorizations; verification; nominations of representatives; declarations; documents relating to maintenance and defense of the resulting industrial property rights; assignments of rights to apply for and acquire patents and trademark registrations; and evidence of such assignments; request for the registration of patents as available for licensing; reports of inventions and petitions for waiver of patent rights to any department or agency of the United States Government; and, assignments, licenses and other instruments confirmatory of Government rights in patents and inventions, to Jeffrey L. Forman, Program Manager, Patent Office Liaison.

Date:

Aug. 4, 2000

Gerald Rosenthal  
Vice President, Intellectual Property & Licensing  
International Business Machines Corporation

## Assignment

Whereas, I/we

INVENTOR  
AND CITY

(1) Vittorio Castelli  
County of Westchester

of Croton-on-Hudson  
and State of New York

INVENTOR  
AND CITY

(2) Peter A. Franaszek  
County of Westchester

of Mount Kisko  
and State of New York

have invented certain improvements in

TITLE

METHOD AND APPARATUS FOR PREDICTION OF COMPUTER SYSTEM  
PERFORMANCE BASED ON TYPES AND NUMBERS OF ACTIVE DEVICES

DATES THAT  
INVENTORS  
SIGNED THE  
DECLARATION

and executed, respectively, a United States patent application  
therefor on (1) , 2001; and (2) , 2001.

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a  
corporation of New York, having a place of business at Armonk, New York  
10504, (hereinafter called IBM), desires to acquire the entire right, title  
and interest in the said application and invention, and to any United States  
and foreign patents to be obtained therefor;

Now therefore, for a valuable consideration, receipt  
whereof is hereby acknowledged, we, the above named, hereby sell, assign, and  
transfer to IBM, its successors and assigns, the entire right, title and  
interest in the said application and invention therein disclosed for the  
United States and foreign countries, and all rights of priority resulting  
from the filing of said United States application, and we request the  
Commissioner of Patents to issue any Letters Patent granted upon the  
inventions set forth in said applications to IBM, its successors and assigns;  
and we hereby agree that IBM may apply for foreign Letters Patent on said  
invention and we will execute all papers necessary in connection with the  
United States and foreign applications when called upon to do so by IBM.

Signed and sealed

CITY AND  
DATE

(1) at Yorktown Heights NY  
on July 23

2001, Vittorio Castelli SIGNATURE  
( Vittorio Castelli) INVENTOR  
FIRST NAME MIDDLE INITIAL LAST NAME

CITY AND  
DATE

(2) at  
on

2001, Peter A. Franaszek SIGNATURE  
( Peter A. Franaszek) INVENTOR  
FIRST NAME MIDDLE INITIAL LAST NAME

Yorktown Heights,  
NY 7/23/2001

## Assignment

Whereas, I/we

INVENTOR  
AND CITY

(1) Vittorio Castelli  
County of Westchester

of Croton-on-Hudson  
and State of New York

INVENTOR  
AND CITY

(2) Peter A. Franaszek  
County of Westchester

of Mount Kisko  
and State of New York

(3) Joy Alyosius Thomas  
County of Santa Clara

of Sunnyvale  
and State of California

have invented certain improvements in

TITLE

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(3) , 2001

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corporation of New York, having a place of business at Armonk, New York  
10504, (hereinafter called IBM), desires to acquire the entire right, title  
and interest in the said application and invention, and to any United States  
and foreign patents to be obtained therefor;

Now therefore, for a valuable consideration, receipt  
whereof is hereby acknowledged, we, the above named, hereby sell, assign, and  
transfer to IBM, its successors and assigns, the entire right, title and  
interest in the said application and invention therein disclosed for the  
United States and foreign countries, and all rights of priority resulting  
from the filing of said United States application, and we request the  
Commissioner of Patents to issue any Letters Patent granted upon the  
inventions set forth in said applications to IBM, its successors and assigns;  
and we hereby agree that IBM may apply for foreign Letters Patent on said  
invention and we will execute all papers necessary in connection with the  
United States and foreign applications when called upon to do so by IBM.

Signed and sealed

CITY AND  
DATE

(1) at YORKTOWN HEIGHTS  
on 01/24/02

2002, Vittorio Castelli SIGNATURE  
(Vittorio Castelli) INVENTOR  
FIRST NAME MIDDLE INITIAL LAST NAME

CITY AND  
DATE

(2) at YORKTOWN HEIGHTS  
on 01/24/02

2001, Peter A. Franaszek SIGNATURE  
(Peter A. Franaszek) INVENTOR  
FIRST NAME MIDDLE INITIAL LAST NAME

CITY AND  
DATE

(3) at SUNNYVALE  
on 1/15/2002

2001, Joy Alyosius Thomas SIGNATURE  
(Joy Alyosius Thomas) INVENTOR  
FIRST NAME MIDDLE INITIAL LAST NAME